## State of California Awards for Innovation in Higher Education Laney College (14)

## **Report of Prosed Use of Award**

- 1) The name of the fiscal agent of the application selected Laney College
- 2) The amount awarded \$1 million dollars
- 3) The amount of funds proposed for expenditure by the fiscal agent

With these funds, we plan to complete the first phase of our multi-year proposal for increasing student success in our Biology courses. These funds will provide the framework for technological upgrades of our lecture and lab facilities as well as provide online support and reduce costs for students. Although our department-wide retention is higher than that of other departments, we would like to see an increase in the success rates of our students of color, veterans and students with disabilities. Many students come to us with a lack of baseline knowledge and an ingrained fear of science courses. With increased use of technology, we believe students will become more comfortable with the material and gain the confidence and knowledge to be more successful in our courses. These funds will also support training for faculty in how to best utilize these technological enhancements. We believe these first steps will help bridge the digital divide and increase success. While we are only measuring our students' progress in biology courses, we anticipate that this access to technology will carry over, positively impacting their progress in their other courses of study as well. Additionally, other College departments will benefit from our student success results that measure the impact of greater access to technology on student performance.

Again, these funds will help with our Phase One:

• Part A outfits our classrooms with technology to increase student engagement and empower faculty to innovate in the classroom.

These are mainly one-time costs to upgrade our classrooms to SMART classrooms. All labs and classrooms (5 lab rooms and one lecture room) will be equipped with technology allowing for multimedia presentations and hands-on demonstrations by both faculty and students. The technology shall include: computer work stations with high quality LCD projectors, sound systems, microscope projectors, projection screens, and white board walls. We plan to have two rooms upgraded for the summer session of 2017, and the rest completed for Fall 2017. There is some variation in the equipment going into each room, based on the needs of the classes taught, so individual costs may vary.

hardware for classrooms	est. budget	# rooms	total
projector	\$1,200.00	6	\$7,200.00
control panel	\$10,000.00	6	\$60,000.00
microscope projector	\$500.00	6	\$3,000.00
4k camera (recording)	\$500.00	6	\$3,000.00
hardware warranties	\$3,000.00	6	\$18,000.00
white board wall	\$1,500.00	5	\$7,500.00
Lenovo IdeaCenter	\$10,800.00	1	\$10,800.00
iPads/tablets	\$35,000.00	5	\$175,000.00
installation	\$8,000.00	5	\$40,000.00
	One time	total	\$324,500.00

## State of California Awards for Innovation in Higher Education Laney College (14)

 Parts B & C distribute iPads loaded with educational support applications and includes training in the use of this technology for faculty.

Part B: Tablets/iPads loaded with the following: access to the lab manual via the college's Learning Management System, digital textbook including customization, and ability for data collection outside of lab (field experiments) via Microsoft365. Licensing software for online classroom support will provide (a) iPad applications for tissue study and model use, (b) digital lab simulations and experiments, (c) online video demonstrations/podcasts (d) digital atlas, and the new analytical software to facilitate student learning. With online access to material, students can access the text, manuals, etc. outside of the classroom. There will also be open lab hours so that students can go to the lab room to utilize the tablets, microscopes and models, and receive tutoring.

yearly expenses (3 years)	est. budget	#	total
Embedded tutors	\$10,000.00	8	\$80,000.00
Open Lab coordinator	\$75,000.00	1	\$75,000.00
Replacement bulbs	\$500.00	2	\$1,000.00
Digital Versions:		#students	
Essentials (BIOL 10)	\$100.00	180	\$18,000.00
Essentials (BIOL 24)	\$115.00	60	\$6,900.00
Mastering for other courses	\$20.00	210	\$4,200.00
Professional Dev/RT for faculty	\$40,000.00	1	\$40,000.00
		total	\$225,100.00
		3 year	\$675,300.00
		Total	\$999,800.00

Part C: All biology faculty will receive professional development/training to become familiar with the wide array of technology and e-tools available. It will also provide a basis for expanded professional development programs college-wide as the successful components of this effort are replicated.

Collectively, these efforts will ensure more equitable access to our biology curriculum for all groups of students. With 24/7 access, this technology-enabled learning framework will help level the playing field for disenfranchised science students. Independent of time and place, students will be able to learn collaboratively and independently while applying, testing and assessing their knowledge and skills.

4) The amount of funds to be transferred by fiscal agent to other participants – not applicable